



Radiant tube burner

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RTE-80A, 100A, 125A, 150A

RTE-80A, 100A, 125A, 150A Radiant tube burner

A radiant tube burner that can obtain a stable air-fuel ratio and also can handle various gases

Feature

- 1 It is a high-performance radiant tube burner that provides a stable air-fuel ratio because it has a primary air adjustment mechanism (premix).
- 2 Energy-saving set that can recover waste heat by combining with exclusive heat exchanger is also possible.
(Please inquire separately)
- 3 Because the pilot burner is built in, stable ignition can always be performed.
(Please contact us if you want direct ignition type)
- 4 It can be attached to tubes of various shapes.
- 5 It can also correspond to various gases.



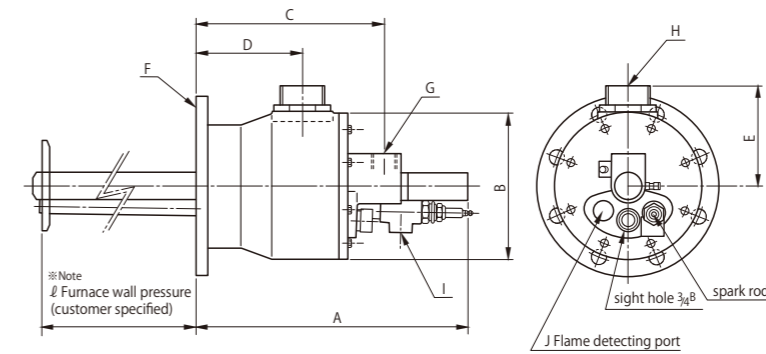
Main Usage

- Various controlled atmosphere heat treatment furnace
- Indirect air heater
- liquid heating

Specifications

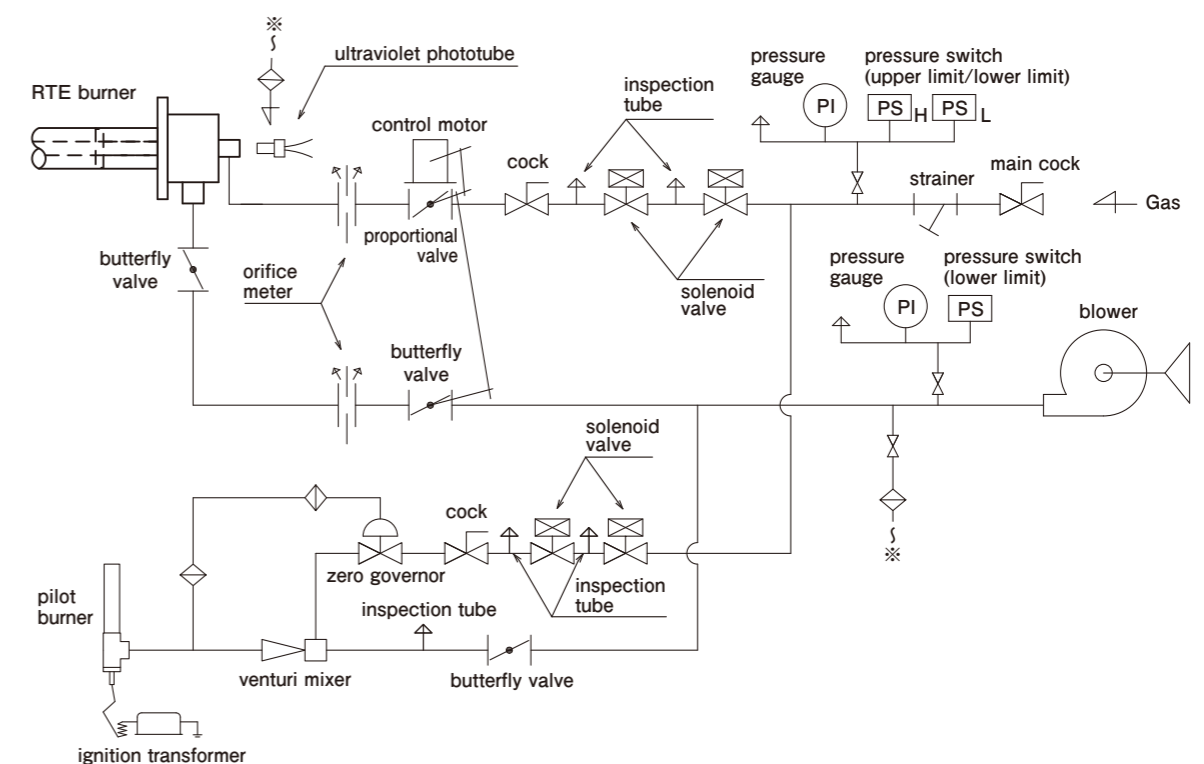
| Model | RTE-80A | RTE-100A | RTE-125A | RTE-150A |
|--|----------------------|----------|----------|----------|
| Standard combustion capacity (kW) | 41 | 70 | 93 | 145 |
| Standard gas head pressure (kPa) | 1.3 | 1.3 | 1.4 | 1.5 |
| Standard air head pressure (m ³ /h) | 45 | 75 | 100 | 157 |
| Standard air head pressure (kPa) | 2.8 | 2.8 | 2.8 | 2.8 |
| Connecting size (Rc) | gas | 1/2 | 3/4 | 1 1/4 |
| | air | 1 1/4 | 1 1/2 | 2 1/2 |
| | mixing gas for pilot | 3/8 | 1/2 | 1/2 |

Overall size



| Model | RTE-80A | RTE-100A | RTE-125A | RTE-150A |
|---------------------------------|--------------------------|----------|----------|----------|
| Overall size (mm) | A | 260 | 315 | 405 |
| | B (φ) | 140 | 150 | 190 |
| | C | 165 | 206 | 247 |
| | D | 90 | 115 | 140 |
| | E | 120 | 125 | 148 |
| Connecting size (flange JIS 5K) | F (Furnace body) | 3 | 4 | 5 |
| | G (Gas) | 1/2 | 3/4 | 1 |
| Connecting size (Rc) | H (Air) | 1 1/4 | 1 1/2 | 2 |
| | I (Mixing gas for pilot) | 3/8 | 1/2 | 1/2 |
| | J (Flame detecting port) | 1/2 | 1/2 | 3/4 |

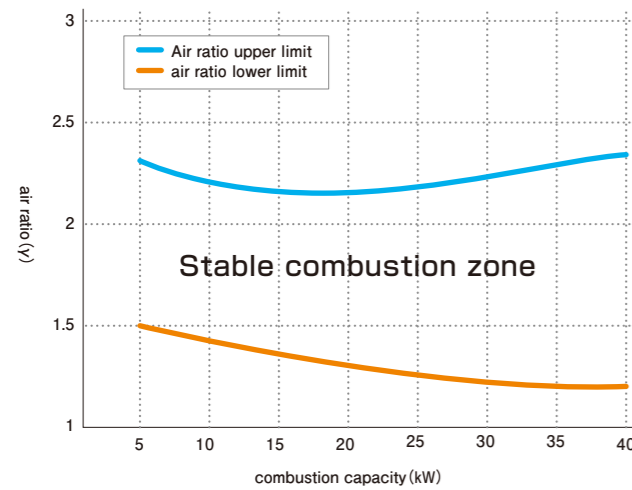
Example of flow sheet



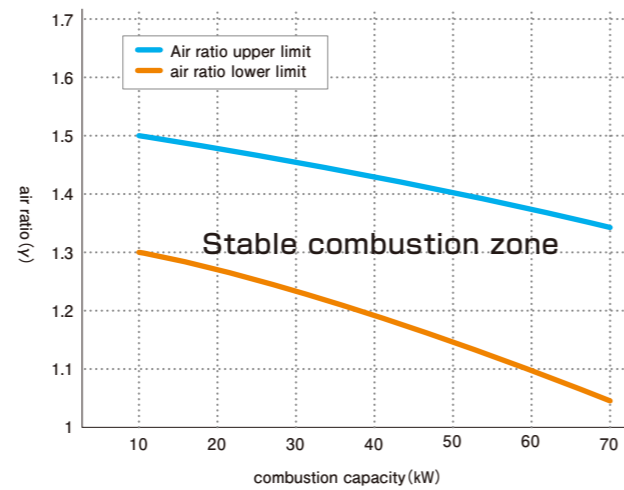
Data

Stable combustion zone

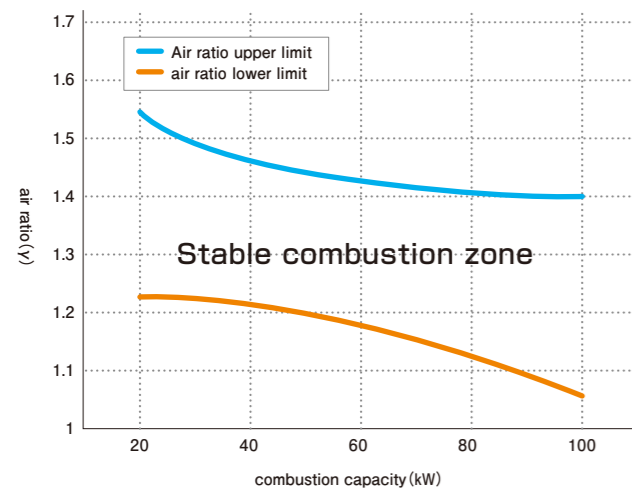
RTE-80A



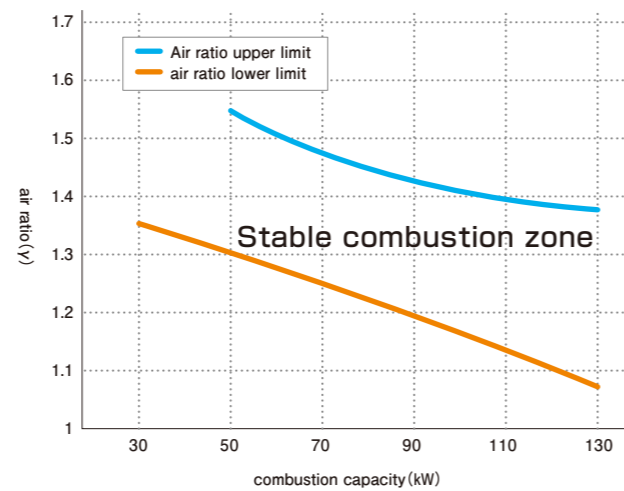
RTE-100A



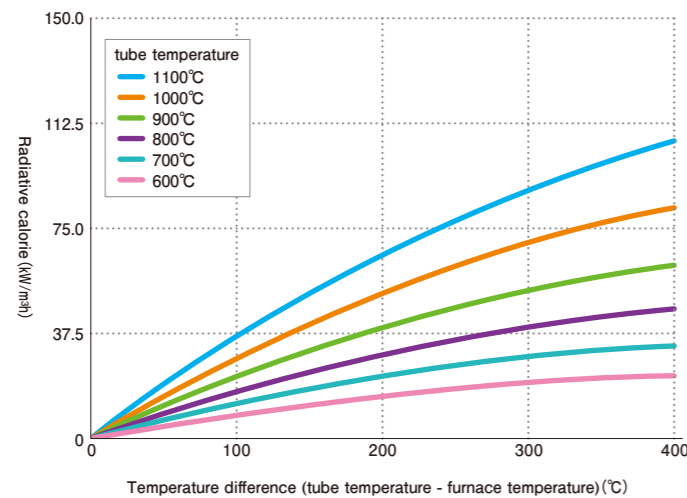
RTE-125A



RTE-150A



Radiative calorie (theoretical value)



Handling Precautions

● RTE burner is designed for rolled steel pipe (SUS 310S) (Schedule 20S), so it will be specially designed for tubes exceeding the following thickness

| | RTE-80A | RTE-100A | RTE-125A | RTE-150A |
|---------------|---------|----------|----------|----------|
| Thickness(mm) | 4.0 | 4.0 | 5.0 | 5.0 |

● Exhaust from the RTE burner must be exhausted separately, or it must be trimmed, diluted with outside air and gathered. When used with several units, if exhausted in common, it will be affected by each other, adjustment will be out of order, causing soot etc to occur.

● All RTE burners are ultraviolet photoelectric type. Since the photoelectric tube is sensitive to heat, it is necessary to protect radiation such as radiation from the burner and tube, or heat transfer of the burner body. Be sure to send cooling air.

● Distance from the burner flange to the top, it is common to match the thickness of the insulating material of the furnace wall.

● If top is put inside the insulation material, the heat dissipation of the tube worsens and the temperature rises locally. In order to prevent this, the RTE burner will produce it according to the furnace wall thickness.

In addition to the (furnace wall thickness + A dimension), be sure to secure the maintenance space at the rear of the burner

● For the RTE burner, always install an orifice meter for both gas and air to set and manage an appropriate air ratio. If the air ratio deviates due to deterioration of the blower capacity (filter clogging) · malfunction of the governor, local heating of the tube, soot may be clogged in the heat exchanger.

When ordering please let us know the following points

| name | |
|--------------------------------|----------------------------------|
| In the case of the burner only | Model (Size indication) RTE-○○○A |

- Purpose
- Required calorie (kW)
- Operating temperature (°C)
- Gas type
- Tube and tube inner diameter used
- Presence / absence of heat exchanger
- Distance to burner top (mm) (L)
(It is limited to 150 ~ 500 mm.)

